

UNITED STATES DISTRICT COURT  
DISTRICT OF MASSACHUSETTS

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SCANSOFT, INC.,

Plaintiff,

v.

VOICE SIGNAL TECHNOLOGIES, INC.,  
LAURENCE S. GILICK, ROBERT S. ROTH,  
JONATHAN P. YAMRON and MANFRED G.  
GRABHERR,

Defendants.

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C. A. No. 04-10353-PBS

**VOICE SIGNAL TECHNOLOGIES’  
SUR-REPLY BRIEF FOR U. S. PATENT 6,501,966**

This Sur-Reply responds to arguments made for the first time in ScanSoft’s Reply Brief with respect to the construction of the claims of U. S. Patent No. 6,501,966.

**ScanSoft’s Preamble Argument.**

In its Reply Brief, ScanSoft contends that the preamble to Claim 1 of the '966 patent does not limit the claim (or any claim that depends from Claim 1). ScanSoft cites one of two closely-related, nineteenth-century Supreme Court cases. In *Cochrane v. Deener*, 94 U.S. 780, 787-88 (1876), cited by ScanSoft, the Supreme Court held that, in certain circumstances, a process “may” be patentable without any limitation regarding the “instrumentality used to perform the process.” ScanSoft does not suggest that the claim or disclosure in *Cochrane* is analogous to the claim or disclosure in this case, and does not explain why the possibility identified in *Cochrane* should be realized in this case. ScanSoft does not cite *Lawlor v. Hamilton*, 124 U.S. 1 (1888), in which the Supreme Court, speaking through the same Justice, held that a claimed process is

limited to use with a particular instrumentality where, as here, that is what was described by the patent as the invention. The Court said:

But while we are satisfied that the invention is that of a process, it is nevertheless limited by the clear terms of the specification . . . to the use of the kind of instrumentality described, namely, in the first part of the process, to the use of powerful revolving rollers for crushing the seed between them under pressure. The claim cannot have the broad generality which its terms, taken literally, might, at first sight, seem to imply. . . .

124 U.S. at 10.

*Lawlor* remains good law. *Eaton v. Rockwell International Corp.*, 323 F.3d 1322, 1339 (Fed. Cir. 2003) (process claim limited by structure recited in a claim preamble). “The effect preamble language should be given can be resolved only on review of the entirety of the patent to gain an understanding of what the inventors actually invented and intended to encompass in the claim.” A claim construction that does not consider the “problem” on which the “inventors were working” “would be divorced from reality.” *Corning Glass Works v. Sumitomo Electric U.S.A., Inc.*, 868 F.2d 1251, 1257 (Fed. Cir. 1989) (preamble held limiting); *L’Oréal, S.A. v. Revlon Consumer Products Corp.*, 200 WL 941480 \*3 (D. Del.) (same).

“When the claim drafter chooses to use both the preamble and the body to define the subject matter of the claimed invention,” as, for example, when “limitations in the body of the claim derive antecedent basis from the preamble,” terms and phrases in the preamble limit the claim. *Electroscientific Industries Inc. v. Dynamic Details Inc.*, 307 F.3d 1343, 1348 (Fed. Cir. 2002) (method claim limited by structure in the preamble which provides antecedent basis for the steps of the claim); *Bell Communications v. Vitalink Communications*, 55 F.3d 615, 620-21 (Fed. Cir. 1995) (process claim limited by structure in preamble; steps “incorporate by reference” terms used in the preamble); *Griffin v. Bertina*, 285 F.3d 1029, 1033 (Fed. Cir. 2002) (preamble gives context to the steps stated in the claim).

The application of these principles to this case compels the conclusion that the preamble to Claim 1 limits the claim. First, the patent describes, and the preamble states, “what the inventors actually invented and intended to encompass in the claim.” From beginning to end, the patent describes the invention as a centrally-located voice recognition facility that is accessible to all users of a telecommunications system. The title of the patent, the abstract, the description of the problem to be addressed, the Summary of the Invention, the stated advantages of the invention, and every single embodiment of the invention, all point to that conclusion.

Second, the inventors chose to use the preamble as part of the definition of the claimed invention. The individual steps recited in Claim 1, and limitations contained in most of the claims that depend from Claim 1, derive antecedent basis from the Claim 1 preamble. Three of the four steps of Claim 1 reference “the telecommunication user”, a phrase that references preamble language and has meaning only when read in the context of the preamble. Dependent claims 5, 13 and 19 refer to “the telecommunication system”, thus using that phrase in the preamble to define the invention. And, dependent claims 8-15 require the “apparatus” of Claim 1 which can only be the “mobile telecommunications system which includes a voice recognizer” -- terms that appear only in the preamble. Read out of the context of the Claim 1 preamble, all of these claims and claim limitations lack antecedent basis.

Third, the limitation in the preamble -- a speech recognition method for a mobile telecommunication network -- is what distinguishes the claim from the prior art, including the inventors’ own prior art voice dialing method.

**ScanSoft’s Preferred Embodiment Argument.**

ScanSoft argues erroneously that Voice Signal is attempting to limit the '933 claims to a preferred embodiment. As ScanSoft itself argues in the context of the '630 patent, a court should

consult the written description (a) to determine whether it defines a claim term and (b) to ascertain the meaning of a claim term where that meaning is not clear on the face of the claim. ScanSoft '630 Mem. at 5. Here, any doubt as to the meaning of the phrase “a speech recognition method for a mobile communications system” is removed by the specification, of which the claim is a part. Every aspect of the specification makes clear that the invention is a telecommunications system-based, as distinguished from a cell-phone-based, voice dialing functionality. Moreover, the specification contains definitional language -- a proposition that ScanSoft does not dispute. A mobile telecommunications system is defined as that which “connects mobile telecommunications customers.” (3:35-37) The claim phrase “a speech recognition method *for* a mobile telecommunications system” cannot be stretched to include (as ScanSoft argues) voice recognition that is contained in a single cell phone, and that merely intermediates between the user and that cell phone’s dialing mechanism. One cell phone does not connect mobile telecommunication customers; a telecommunications network does.

ScanSoft asserts that “the specification emphasizes placing the speech recognizer at the switch is the *preferred embodiment* of the invention.” Reply Mem. at 4 (emphasis by ScanSoft). Not so. The written description states that a “Speech Recognition System [that is] *interconnected internally* to the MTX”, (*i.e.*, the embodiment of Fig. 2) is the preferred embodiment of the invention (4:13-16). A “Speech Recognition System [that is] *connected as an external peripheral* to the MTX through a set of . . . digital trunk lines” (*i.e.*, the embodiment of Fig. 1) is the only other embodiment that is disclosed, or referenced in any way, in the patent. 3:66-4:2. No mention is ever made of a cell phone-based voice dialer, and ScanSoft cites none.

**ScanSoft's Prior Art Argument.**

ScanSoft does not deny (a) that the ordered series of commands and instructions disclosed and claimed in the '966 patent is the same as that of prior art mobile phone-based voice dialing methods, (b) that this prior art that was before the Patent Office, or (c) that this art may properly be used to determine the likely intended scope of the claims of the '966 patent. Instead, ScanSoft styles Voice Signal's argument as a "veiled attack" on validity. Reply Mem. at 8. To the contrary, it is black letter law that, as between two conflicting claim constructions, the Court should select the construction that tends to preserve validity. *VLT Corporation v. Unitrode Corporation*, 130 F. Supp. 178, 192 (D. Mass. 2001) (Saris, J.). Limiting the '966 claims to network-based speech recognition systems avoids the handset-based voice dialing methods of the disclosed prior art.

**ScanSoft's "Smartphone" Argument.**

Claim 1 requires the step of "collecting digits representing a telephone number to be dialed received from the mobile telecommunications user." ScanSoft asks the Court to add a limitation requiring that "the method uses the system's intelligence to detect when the user has spoken [a] telephone number." ScanSoft Reply at 8-9. The claim language contains no such requirement. Neither the written description nor the prosecution history of the '966 patent (or any other patent derived from the same application) suggest that "smart dialing" -- a phrase coined by ScanSoft's counsel for Markman hearing purposes only -- is part of the invention of the '966 patent.

The patent teaches that, if a user speaks a first command type (*e.g.*, "Dial"), the system prompts the user to speak, and the system then listens for, the digits of a phone number (as distinguished from prompting the user to speak, and listening for, a keyword). The claim

limitation is satisfied if the system “collects” the digits of the telephone number that the user wishes to dial -- “the digits representing a telephone number to be dialed received from the mobile telecommunications user.” Nothing more is required.

Because it is uncontested that the command/instruction sequence disclosed and claimed as the steps of Claim 1 of the '966 patent was disclosed in prior art mobile phone-based dialing systems, “smart dialing” is, in ScanSoft’s view, the sole inventive feature of claim 1 of the '966 patent. If “smart dialing” is the invention, that invention is well concealed from a reader of the patent. It does not address a purpose of the invention and is not said, anywhere in the patent, to be the invention itself. *See, e.g.*, 1:24-2:34. Moreover, the '966 patent teaches only that the system stops “collecting” digits “if the digit collected is the last digit expected in the string.” 7:6. The method used to determine that a spoken digit is the last digit -- *i.e.*, the supposed invention -- is not disclosed. There is, moreover, no suggestion that the system “knows” that the spoken digits are an actual telephone number. And, this supposed invention does not, in any event, distinguish prior art systems that, by the use of various methods, stopped collecting digits when the last digit to be expected had been spoken. Voice Signal Mem. at 33.<sup>1</sup>

#### **ScanSoft’s Inventors’ Testimony Argument.**

ScanSoft does not deny that the inventor, Peter Foster, testified (1) that he intended to patent the network-based voice dialing system that Voice Control Systems sold to McCaw Cellular, a network service provider, and (2) that he understood that other, earlier “inventions” made by the same persons could not be patented because they entered the public domain years before Voice Control Systems filed its priority application in 1992. Foster Dep. 25-26, 118-120.

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<sup>1</sup> In fact, exactly the same steps are disclosed in the '966 patent as are elucidated in the prior art. After the user has finished speaking the telephone number that the user intends to call, the user says “Verify,” the system repeats back the telephone number that it has recognized, and, if it is correct, the user says “Send.” *Compare* 7:12-30, Fig. 6, steps 152, 156, 162, 166 and 168 with '966 Tutorial, Ex. D, p. 129, col. 2 and Ex. E, p. 4.

Whether “voice dialing in wireless environments” -- the phrase from Foster’s testimony that ScanSoft quotes (Reply at 5) -- was an “invention” is thus a moot point. If it was an invention, that invention entered the public domain in 1986 via the Schalk and Helms articles (’966 Tutorial, Exs. C and D) and the 1989 Uniden product was sold (’966 Tutorial, Ex. E). As Foster testified, it was no longer patentable in 1992, and there was no intention to patent it. *Id.*

ScanSoft’s description of co-inventor Schalk’s testimony is similarly misleading. Schalk testified repeatedly that the Uniden (mobile phone-based) voice dialer did not employ a “speech recognition method for a telecommunications system.” It was, he explained, merely an “interface to the dialing process of the phone.” (Schalk Dep., 160, 164).<sup>2</sup> The Schalk testimony quoted by ScanSoft was Schalk’s opinion about what is disclosed in the ’966 patent, not his understanding of the meaning of the relevant claim language. Schalk Dep. at 168. Schalk’s testimony that Voice Control Systems invented “a way to extend our speaker-independent algorithm to operate in a speaker-dependent mode in a cell phone” -- language that ScanSoft omits from the quotation at page 6 of its Reply (quoting Schalk Dep. at 200-201), but which is necessary to put the quoted language in context -- is wholly irrelevant to a construction of the claims of the ’966 patent. As Schalk testified, that “invention” is not even described in the ’966 patent. Schalk Dep., 201-202.

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<sup>2</sup> The portions of the Schalk Deposition that are cited in this Sur-Reply that have not been previously filed with the Court are attached as an exhibit to the Declaration of Wendy S. Plotkin filed herewith.

**CONCLUSION**

For the reasons stated above, the claim constructions proposed by Voice Signal should be adopted.

Respectfully submitted,

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By its attorneys,

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